

## CLAIMS

What I claim as my invention is:-

An implantable screw-like device which can serve simultaneously the following

Functions or capabilities.

- 9.10
1. Acting as an improved basic external fixator implant with triple stabilizing factors of radial preload around the drill-hole of a smaller diameter, axial preload on the thread along the length of the drill-hole, and surface preload of the head upon the bone surface at 90° to the radial preload.
  2. Capable of renewing the enhanced stability by subsequent turning of the device.
  3. Acting simultaneously in an internal lag-screw mode, and participating in an external fixator construct.
  4. Capable of repeated renewable lag-screw compression from outside the skin, since this compression always gets loosened with time in the conventional implanted lag-screw, without any need for repeat anaesthesias or re-exposures to search for screw-heads.
  5. Adding the renewability of compression, to cannulated screws in lag mode, inserted with guide-wire technique into joint fragments.
  6. The claim is for the principles stated above and not for any single particular pattern or dimensions thereof. I claim any device capable of the above functions, made of whatever material, whether for human or veterinary or any other implantation or mechanical application, as my invention.
  7. While originally being intended for the above purposes, I further claim the

invention even if it is used for other biological fixations/ immobilizations such as botanical or other forms of life, and in tissues other than bone wherever applicable.

8. I further claim this invention in connection with any other use as in engineering or any other field of mechanical or biological endeavor, in which it serves to hold and compress together two or more fragments or masses of material together, while taking part in an outside construct.

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